

What is claimed is:

[0029] 1. A method for detecting an atypical occurrence within a given region in a telecommunications network, comprising:

[0030] assigning a given weight to each of a plurality of destination addresses within said region according to said weighting system;

[0031] collecting call data for said region for a given period of time, said call data including destination addresses and corresponding call occurrence times;

[0032] developing a weighted call traffic pattern based upon said call data; and,

[0033] using said weighted call traffic pattern to detect an atypical occurrence within said region.

[0034] 2. The method defined in claim 1 wherein said atypical occurrence is a public health crisis, said public health crisis including bioterrorist attacks and epidemics.

[0035] 3. The method defined in claim 2 wherein said destination addresses comprise telephone numbers.

[0036] 4. The method defined in claim 3 wherein said weighting system includes giving more weight to telephone numbers associated with medical-related locations, pharmacies, schools and workplaces than to other telephone numbers.

[0037] 5. The method defined in claim 1 wherein said call data comprises call detail records.

[0038] 6. The method defined in claim 5 further comprising sending the weighted destination addresses to a special database.

[0039] 7. The method defined in claim 6 further comprising adding terminating triggers to said destination addresses.

[0040] 8. The method defined in claim 1 further comprising adding an additional field to each of said plurality of destination addresses, said field corresponding to said weight of said destination address.

[0041] 9. The method defined in claim 1 wherein said call data comprises initial address messages.

[0042] 10. A system for detecting an atypical occurrence within a given region in a telecommunications network, comprising:

[0043] means for assigning a given weight to each of a plurality of destination addresses within said region according to said weighting system;

[0044] means for collecting call data for said region for a given period of time, said call data including destination addresses and corresponding call occurrence times;

[0045] means for developing a weighted call traffic pattern based upon said call data; and,

[0046] means for using said weighted call traffic pattern to detect an atypical occurrence within said region.

[0047] 11. The system defined in claim 10 wherein said atypical occurrence is a public health crisis, said public health crisis including bioterrorist attacks and epidemics.

[0048] 12. The system defined in claim 11 wherein said destination addresses comprise telephone numbers.

[0049] 13. The system defined in claim 12 wherein said weighting system includes giving more weight to telephone numbers associated with medical-related locations, pharmacies, schools and workplaces than to other telephone numbers.

[0050] 14. The system defined in claim 13 wherein said call data comprises call detail records.

[0051] 15. The system defined in claim 14 further comprising means for sending the weighted destination addresses to a special database.

[0052] 16. The system defined in claim 15 further comprising means for adding terminating triggers to said destination addresses.

[0053] 17. The system defined in claim 10 further comprising means for adding an additional field to each of said plurality of destination addresses, said field corresponding to said weight of said destination address.

[0054] 18. The system defined in claim 10 wherein said call data comprises initial address messages.